THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

Paper No. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DAVID W. DEETZ and RUSSELL L. MORRIS

Appeal No. 1995-4405
Application No. 08/083,680[1]

ON BRIEF

Before DOWNEY, WALTZ, and SPIEGEL, *Administrative Patent Judges.*

SPIEGEL, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 26 through 30, which are all of the claims pending in this application. Claim 26 is illustrative:

> 26. A method of controlling a concentration of a gaseous species of interest in a reference medium as a predetermined function of temperature throughout a selected temperature range comprising the steps of:

[1] Application for patent filed June 25, 1993. According to appellants, this application is a continuation of Application 07/806,495, filed December 13, 1991, now U.S. Patent No. 5,223,433, issued June 29, 1993.

(a) isolating the reference medium containing the gaseous species of interest in a gas-permeable reference enclosure;
(b) providing a separate reservoir source of the gaseous species of interest outside but in communication with the gas permeable reference enclosure, wherein the reservoir source of gaseous species of interest is formulated to control the concentration of the gaseous species of interest in the reference medium according to a desired function of temperature, f(T), over the selected temperature range;
(c) enclosing the reference medium and reservoir source in a substantially gas-tight hollow common enclosure surrounded by a gas phase that forms a common atmosphere;
and
(d) enabling the reservoir source to compensate for temperature fluctuations within the selected temperature range by controlling the partial pressure of the gaseous species of interest in the common enclosure as a function of temperature such that the concentration of the gaseous species of interest in the reference medium varies as a function of temperature according to the f(T) over the selected temperature range.

ISSUES

Claims 26-30 stand rejected under 35 U.S.C. § 112, first paragraph, on the ground that the specification, as originally filed, fails to provide support for the invention as is now claimed. Id. In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims and to the respective positions articulated by the appellants and the examiner. We make reference to the examiner's answer (Paper No. 13, mailed November 8, 1994) and the supplemental examiner's answer (Paper No. 15, mailed March 7, 1995) for the examiner's reasoning in support of the rejection, and to the appellants' brief (Paper No. 12, filed October 17, 1994), reply brief (Paper

No. 14, filed November 28, 1994) and supplemental reply brief (Paper No. 16, filed April 3, 1995) for the appellants' arguments thereagainst.

THE INVENTION

Appellants' claimed invention is directed to a method and system for controlling the concentration of a gas of interest in a first or "reference" medium contained in a first gas-permeable reference enclosure by means of a second or "reservoir" source of the gas contained in a second gas-permeable enclosure which is used to control changes in the partial pressure of the gas in a common environmental atmosphere formed within a gas-tight hollow common enclosure containing both the reference enclosure and the reservoir source as a function of temperature. The reservoir source is formulated such that the solubility of the gas therein is more temperature sensitive, i.e., responds faster, over a selected temperature range than in the reference medium. (Brief, pages 2-3).

For example, as the temperature of the common enclosure and its contents rises, the solubility of the gas in both the reference medium and the reservoir source decreases. Gas from the reservoir source is released into the common atmosphere at a faster rate than it is released from the reference medium, thereby dominating the increase in the partial pressure of the gas in the common atmosphere such that the amount of gas released from the reference medium is controlled (specification, para. bridging pages 5-6). In other words, the reservoir source controls the partial pressure of the gas inside

the common enclosure which in turn controls the partial pressure and, thereby the concentration, of the gas within the reference medium.

According to the specification, the relatively increased responsiveness of the reservoir source to temperature can be based on a variety of properties, e.g., a pH difference in the reference medium and the reservoir source, relative solubility differences of the gas in the reservoir source and the reference medium, or having the second gas-permeable enclosure containing the reservoir source be more permeable to the gas than the first gas-permeable enclosure which contains the reference medium (para. bridging pages 10-11).

OPINION

According to the examiner, the only support for the new claims is on page 4, lines 20-22 of the specification and, since the only illustration of controlling the concentration of a gas in a reference medium as a function of temperature over a selected range describes keeping the concentration of a calibration gas in a reference medium *constant* in order to improve the accuracy of the calibration system, the single statement on page 4 is inadequate to support a diametrically opposed invention wherein the concentration of the gas of interest is controllably *varied* as a function of temperature (answer, pages 4-7).

Although the examiner has clarified that the rejection is not based on new matter (see answer, page 2; reply brief, page 1), it is unclear whether the rejection is based on lack of written descriptive

support or lack of enablement. Our reviewing court has made it clear that written description and enablement are separate requirements under 35 U.S.C. § 112, first paragraph. *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1560, 19 USPQ2d 1111, 1114 (Fed. Cir. 1991). Therefore, we will treat these issues separately.

A specification complies with the description requirement of 35 U.S.C. § 112, first paragraph, if it conveys with reasonable clarity to those skilled in the art that, as of the filing date sought, the inventor was in possession of the invention. The content of the drawings may also be considered in considering compliance with the written description requirement. *Id.* The examiner has the initial burden of establishing a *prima facie* case of lack of an adequate written description. *In re Wertheim*, 541 F.2d 257, 265, 191 USPQ 90, 98 (CCPA 1976).

Here, Fig. 3 of the drawings and the specification (page 4, lines 14-22; page 8, lines 7-12; page 14, lines 11-24) disclose controlling the partial pressure of a gas (pCO_2) over a range of temperatures by a reservoir (based on pH differences) to provide either a constant or variable gas concentration. The examiner has not explained, and it is not apparent, why this disclosure would not have conveyed to one of ordinary skill in the art that as of appellants' filing date, appellants were in possession of a method and system wherein the concentration of a gas of interest in a reference medium is controlled such that the concentration of the gas in the reference medium varies as a function of temperature over a selected temperature range as recited in appellants' claims. Moreover, the

examiner erred in neither acknowledging nor addressing appellants' explicit arguments based on Fig. 3 and its explanatory text in the specification. Thus, we will not sustain the rejection on the basis of written description.

A specification complies with the enablement requirement of 35 U.S.C. § 112, first paragraph, if it allows one of ordinary skill in the art to make and use the claimed invention without undue experimentation and, again, the examiner has the initial burden of establishing lack of enablement. *In re Wright*, 999 F.2d 1557, 1561, 27 USPQ2d 1510, 1513 (Fed. Cir. 1993).

The examiner urges that the disclosure fails to support the scope of the invention (answer, page 7) but cites no evidence and makes no analysis of the kind which the Federal Circuit approved in *In re Wands*, 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988) showing on this record that one of ordinary skill in the art would have had any particular difficulty in carrying out appellants' claimed invention without undue experimentation. Once again, the examiner failed to address appellants' argument that the specification, especially on page 13, together with the Figures enabled adjusting the reservoir response to produce a controlled, albeit variable, concentration of the gas of interest in the reference medium (brief, pages 3-4). Therefore, we will not sustain the rejection on the basis of lack of enablement.

For the above reasons, we find the examiner has not carried the burden of establishing a *prima facie* case of lack of an adequate written description or an enabling disclosure. The rejection under 35 U.S.C. § 112, first paragraph, is reversed.

CONCLUSION

To summarize, the decision of the examiner to reject claims 26-30 under 35 U.S.C. § 112, first paragraph, is **reversed**.

OTHER MATTERS

The examiner should consider whether one or more of pending claims 26-30 in this case should be rejected under the judicially created doctrine of obviousness-type double patenting over one or more of the claims granted in its parent Application 07/806,495, now issued U.S. Patent No. 5,223,433.

REVERSED

MARY F. DOWNEY	)
Administrative Patent Judge	)
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	)
	) BOARD OF PATENT
THOMAS A. WALTZ	) APPEALS
Administrative Patent Judge	) AND

) INTERFERENCES
)
)
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CAROL A. SPIEGEL)
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